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To Whom it May Concern:

I would like to address you first, as a mother and second, as a certified Child Passenger Safety Technician.

I believe as parents when we know better, we do better. I'm so thankful I had the opportunity to become a certified Child Passenger Safety Technician and am able to apply that knowledge when transporting my own children. I dutifully kept my youngest child rear-facing until I needed to clean his car seat one day at age three and a half. I secured him forward facing in his spare seat for a ten minute drive. As luck would have it, a deer ran in front of me and I hit the brakes. My three year old said, "That hurt my neck! Turn me back around!" I did so, and kept him that way until he maxed out the seat limits at four and a half years.

Unfortunately, shortly after turning him forward facing, he and I were in a roll-over accident which totaled our vehicle. I was carried away on a backboard with a cervical collar, bruises, and a concussion. My son walked away from his five-point harness without a mark on him. I do not believe the outcome would have been the same had he been prematurely moved into a booster seat, as the current law allows.

As a certified Child Passenger Safety Technician I advocate for, and use, best practice when it comes to keeping children safe in a vehicle. There are times when I am met with great resistance because people know the law, and assume that is what is best for their children. House Bill No. 5559 would bring Michigan's child safety seat law closer to the AAP and CDC recommendations, as well as best practice, keeping our most vulnerable population safer.

Rear-facing until a minimum of age two is of vital importance. A toddler's vertebrae are connected via cartilage rather than ossified bone. Those connections are slowly closing over time. There are three major points of ossification. According to a study published in the Association for the Advancement of Automotive Medicine, the first station to close is the C3, second is the axis, and third is the atlas. The results of the study show:

50% probability that the primary closure of the C3 is complete at age 2 and the secondary at age 3.

50% probability that the primary closure of the axis is complete at age 5 and the secondary at age 6.

50% probability that the primary closure of the atlas is complete at age 7 and the secondary at age 8.

These findings show that before age two, none of the cartilaginous spaces have completed ossification. Those pieces of cartilage have the ability to stretch up to two inches. Yet only 1/4" stretch is enough to rupture the spinal column, resulting in paralysis or death.

According to NHTSA, roughly 60% of vehicle crashes are frontal impacts and 20% are side impacts. During a crash, occupants will travel towards the point of impact, putting all the stress on the neck and spine. At that moment there are actually three impacts: the vehicle striking whatever it strikes, the body of the occupant being retained by the seat belt or harness, and then the internal organs striking the front of the inside of the body. When someone is rear facing, crashes two and three occur in concert and the forces of the crash are more equally diffused along the shell of the seat, holding the neck and spine in line. As previously mentioned, even at three years old, my child was proof of the benefits of rear-facing.

Michigan's current law allows a four year old to be responsible for keeping themselves properly positioned in a booster seat. Having worked in the Early Childhood field for the last twelve years, and as a Child Passenger Safety Technician for the last eight, I have yet to meet a four year old that can, or should, handle that responsibility. Having children in a harnessed seat with a tether keeps them in the proper position, as well as keeping their brain and spinal cord safer by reducing how far a child's head will move forward in a crash.

Requiring children to remain in a booster until ten years old or 57 inches will ensure a better belt fit for most children during, and upon discontinuing, use of the booster.

Parents often look at moving to the next level of car seat as a milestone, rather than as a step down in safety. The passing of House Bill No. 5559 would help keep our children safer, and provide support to the safety advocates looking out for the well-being of the children.

I thank you for your time and consideration in this crucial matter!

Mandi Bliesener

Child Passenger Safety Technician